What is Claimed Is:

1. A method for handling prioritized data in a network, including:

   sending cells of a first packet of data having a first priority;
   processing a second packet of data having a priority higher than that of the first packet;
   suspending the transmission of cells of the first packet;
   sending cells of the second packet; and
   resuming the transmission of cells of the first packet.

2. The method of claim 1, further including:

   processing cells of a third packet with a priority level higher than that of the first and the second packet;
   suspending the transmission of cells of the second packet;
   sending cells of the third packet; and
   resuming the transmission of cells of the second packet.

3. The method of claim 1, wherein at least one of the first and second packets is a datagram.

4. The method of claim 1, wherein the cells of at least one of the first and second packets is a circuit-switched subpacket.

5. The method of claim 1, wherein at least one of the first and second packets is an Internet Protocol packet, and wherein the cells of at least one of the first and second packets are Asynchronous Transfer Mode subpackets.

6. An apparatus for reducing the delay of priority data in a packet network, comprising:

a processor; and

a memory coupled to said processor, said memory storing a first packet comprised of first cells, said first packet having a first priority, and said memory storing instructions adapted to be executed by said processor to send said first cells, and if the priority of a second packet comprised of second cells is higher than the priority of the first packet, then halting the transmission of the first cells, sending the second cells, and then resuming the transmission of the first cells.

7. The apparatus of claim 6, wherein at least one of the first and second packets is a datagram.

8. The apparatus of claim 6, wherein at least one of the first and second cells is a circuit-switched subpacket.

9. The apparatus of claim 6, wherein the first and second packets are Internet Protocol packets and the first and second cells are Asynchronous Transfer Mode subpackets.

10. A channel storing instructions adapted to be executed by a processor to handle prioritized data in a network, comprising:

sending a first packet comprised of first cells by sending the first cells;

interrupting the transmission of the first cells to send second cells that comprise a second packet that has a higher priority than the first packet; and

resuming the transmission of the first cells.

11. The channel of claim 10, wherein the instructions are further adapted to resume the transmission of the first cells after all of the second cells have been sent.

12. The channel of claim 10, wherein the first and second packet are datagrams.

13. The channel of claim 10, wherein the first and second cells are circuit-switched subpackets.

14. The channel of claim 10, wherein at least one of the first and second packets is a circuit-switched packet.

15. The channel of claim 10, wherein at least one of the first and second cells are packet-switched subpackets.

16. A system for handling prioritized data in a network, comprising:

a first switch that sends packets comprised of cells, the first switch configured to suspend the transmission of the cells of a lower priority first packet to transmit the cells of a higher priority second packet, and then resume transmission of the cells of the lower priority first packet; and

a second switch that receives packets comprised of cells, said second switch recognizing n distinct priority levels for packets, where n is an integer, said second switch including n buffers, wherein each of said n buffers stores cells of packets of a single priority.

17. The system of claim 16, wherein the first switch includes means for sending packets that are datagrams.

18. The system of claim 16, wherein the first switch includes means for sending packets that are circuit-switched.

19. The system of claim 16, wherein the first switch includes means for sending cells that are datagrams.

20. The system of claim 16, wherein the first switch includes means for sending cells that are circuit-switched.

21. The method of claim 1, further including determining the priority of at least one of the first packet and the second packet.

22. The apparatus of claim 6, wherein said instructions are further adapted to determine the priority of at least one of said first packet and said second packet.

23. The channel of claim 10, further comprising determining the priority of at least one of the first packet and the second packet.

24. A system for handling prioritized data in a network, comprising:

means for suspending the transmission of first cells of a first packet that has a first priority;

means for sending the second cells of a second packet having a second priority, wherein the second priority is higher than the first priority; and

means for resuming sending the first cells of the first packet after all of the cells of the second packet have been sent.

25. The system of claim 24, further comprising means for determining the priority of at least one of the first packet and the second packet.